

Today's Topics:

2 way radio in China  
42mHz  
General Coverage for ICOM 730  
Letter from the FCC: 20M Maritime Mobile Net  
Magnetic Effects  
mod for tm721A,731A (corrected version)  
VHF DX

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Date: 13 Nov 89 19:35:03 GMT

From: mfcilrodman@CS.YALE.EDU (Paul Rodman)

Subject: 2 way radio in China

In article <11004@csl.stanford.EDU> kawai@csl.stanford.edu (Goh Kawai) writes:

>It is illegal to  
>own devices that can be used to disseminate information in the PRC.  
>For example, it is illegal to own printing presses. Perhaps the rules

I have a interesting story to relate about this subject.

On June 6th I was in a small car going to the Beijing airport [for obvious reasons!]. We stopped at a traffic light, and up ahead at the next light could see some small crowd of people. I happened to glance to my left, and saw an old man, in the classic asian resting-squat position, as you might see anywhere in China. Except, in this case, HE WAS TALKING INTO AN HT, and looking toward the next intersection.

Needless to say, I got very excited and I scanned the crowd at the next intersection, locating one man with another HT.

Apparently, the old guy was a lookout for police and military types, and was reporting us in as just bunch of tourists, so we got waved through without trouble.

The HT looked like a low-range 49Mhz type of thing, probably from Hong Kong.(?)

Paul K. Rodman / KA1ZA / rodman@multiflow.com  
Multiflow Computer, Inc. Tel. 203 488 6090 x 236  
Branford, Ct. 06405

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Date: 13 Nov 89 14:53:10 GMT  
From: gem.mps.ohio-state.edu!usc!merlin.usc.edu!girtab.usc.edu!  
cyamamot@tut.cis.ohio-state.edu (Cliff Yamamoto)  
Subject: 42mHz

In article <4407@itivax.iti.org> jls@itivax.iti.org (Janet L. Smith) writes:  
... [stuff about all the transmissions picked up near 42 MHz] ...  
>My question is - is the 42 mHz range a statewide Sheriff frequency  
>for California? There have been no license designations given  
>(i.e. KMG367, etc). Can anyone give me some information about  
>this? I have been having a great time listing to these  
>transmissions! I have a Bearcat 800XLT with an outside antenna.  
>Thanks  
>Janet L. Smith jls@itivax.iti.org  
>Industrial Technology Institute

Wow, all the way into Michigan!? Well what you have been listening to is  
our California Highway Patrol (aka CHiPs). That's pretty good considering  
how far that is. Unfortunately, you won't be able to pick up the mobile  
units (but who knows?). They run extremely low power, so low in fact that  
I use an antenna up 40 feet plus a GaAs FET preamp to listen to them. I  
can get about 20-30 miles range.

As Bob Parnass can attest, the 800XLT is extremely sensitive. Usually in  
metropolitan areas this causes intermod and overload problems, but fortunately  
it's in advantage in your case.

If you're interested, send me email and I'll send you a list of frequencies  
along with their city/area designations.

Cliff Yamamoto de KA6JRG

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Date: 13 Nov 89 18:50:59 GMT  
From: agate!shelby!portia!jessica!paulf@uchvax.Berkeley.EDU (Paul Flaherty)  
Subject: General Coverage for ICOM 730

In article <8911061322.AA07428@wrdis41.af.mil> writes:  
>  
> Does anyone know of a mod for a ICOM 730 transceiver which would  
>allow general coverage receive/transmit.  
>  
>  
>tnx - Michael mglennon@wrdis01.af.mil

I used to own a 730 (before that, a 720, and after a year, I went back to a 720); As I Recall, the 730 uses several different vcoss, one for each band. If the vcoss could be stretched out of band, then GC is a possibility. But I doubt that's the case, and in any event, you'd have to reprogram the cpu which controls the synth.

If you can deal with the rotary relay noise, go out and find a 720.

--Paul Flaherty, N9FZX | "I asked for a dissertation topic, and for my  
->paulf@shasta.Stanford.EDU | sins, they gave me one."

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Date: 13 Nov 89 19:40:44 GMT  
From: mips!wyse!steveu@apple.com (Steve Wilson xtemp dept303)  
Subject: Letter from the FCC: 20M Maritime Mobile Net

In article <512@rsiatl.UUCP> jgd@rsiatl.UUCP (John G. De Armond) writes:  
>But you missed the whole point of my posting. Sure hams do some good  
>in emergencies. But as an emergency manager, I have to look at both  
>sides of the issue.  
>  
> Stuff deleted - Summary: An ARES group blew it big time.  
>  
>Well, to make a long story short, this event spurred myself and a few  
>others to organize a non-ARES amateur communications squad within  
>the emergency management group. These hams cross trained in a variety  
>of emergency-related skills. For example, I trained hams to be Radiation  
>Monitors. It made much more sense for ONE person who could make radiation  
>readings AND radio the results back to enter a hot area rather than  
>send a radiation monitor AND a ham in. We received significant recognition  
>from both TEMA and FEMA. As far as I know, the group is still functioning.

John,

First off, your judging an entire organization by one individual's performance. (At least thats what you've written about so far)  
Secondly, I do congratulate you on putting together an effective group, but I'd like to challenge you with the possibility that you could have been that much more effective if you'd joined ARES, and tried to change them!

The fact that ARES didn't work in your county doesn't mean it isn't an extremely effective group in other locals! I've got lots of local examples of where the ARES and the city/county governments have a very productive relationship AND we've proved our capabilities to them during the real thing!

>What I'm getting around to saying is that ham radio had little to do  
>with the success of the program. I could just as easily have the squad  
>operating on a CD channel with commercial gear. It is quite common for  
>rescue squad members to buy their own commercial H-Ts.

You typically can't do that in a large metropolitan area. There aren't any free channels. That's why we are asked in to help in the first place. There are certain types of communications, like shelters, that aren't necessary under normal circumstances, but are required during evacuations and such. They don't have the bandwidth to deal with this type of comm AND control of police/fire response. As an example, in the area I live in there are 2 other fire departments on the same channel as my city. This is fine during day-to-day problems, but as I've stated previously, a disaster is when all the systems you have for dealing with emergencies become overloaded, or break.

>  
>In terms of long distance communications, I had a Collins station in the  
>Comm center tuned to military and civilian emergency management frequencies.  
>I also had a satellite link to TEMA and FEMA networks. I could have had,  
>just for the asking, man-portable tactical satellite sets like the military  
>uses.

>  
>The point is that I could have gotten along well without the amateur  
>frequencies. It seems nice to have operators available who know how  
>to push a PTT button but the knowledge of tactical communications in  
>many hams ends there. And many would refuse to learn any better.  
>We had a state training officer in one time to teach a class on tactical  
>communications and dispatching. 2 people showed up.

So this really comes down to the issue of training! First I'd like to point out that your major concern seems to be primarily radiation hazard monitoring. You've chosen to train hams to do that job. That's all well and good, but that ISN'T what the kind of service we've typically been asked to give. Our job is communications! You insist on trying to train your people outside their initial area of interest. Maybe your recruiting your volunteers from the wrong pool. If you use the hams in the areas that they are already schooled in you'll have a higher rate of success. If you take a normal citizen off the street he can be trained with some effort to look at a meter, read same, etc. Is it as easy to take somebody off the street and ask him to install a working antenna system? I'm sure it can also be done, but it makes the most sense to try and provide training for the area people are already interested in. I've had local examples that demonstrate my point. One of my ARES group is also involved in the Baptist church emergency response efforts. He lined up training in damage assessment, first aid, etc. Nobody came from the ham radio community. If I line up a class on how to use packet radio I get a fair turn

out. There is already people interested in the subject at some level.

Don't misunderstand that the organization I represent doesn't have its set of training problems. We certainly do. We have maybe 100 fairly well trained individuals within the county out of 5000 hams. When the world moved we wound up putting in about 3000 man hours over a week period, the majority of these weren't supplied by the trained cadre. The trained group wound up being our shift supervisors, or net controls. We had to train as we went in most cases. It didn't always work, but we survived. You always have to deal with the "out-of-the-woodwork" factor. We don't have a great answer for this problem and are still working on ideas. It is a fact though that most of the people that showed up supplied their own equipment, knew how to use it(at least capable of setting the frequency, etc). This is basically what we needed, how to operate on a controlled net isn't that hard to learn after all.

>Now lets suppose the FCC, still smarting from the No-code and 220  
>controversies, become openly hostile toward Amateur radio. So they  
>decide to find alternative means to accomplish what had traditionally  
>been the ham's role in emergency service. Further, let's stretch  
>this scenario a bit further and say that they decide to take a business  
>approach to the problem. They could take all the ham frequencies below  
>1 GHz and lease commercial channels. The revenue is then used to  
>buy communications equipment for local government use in emergencies.  
>I'm sure that a \$300 portable satellite communications station could be  
>supplied to the government given enough volume. It has been done  
>before. Next, volunteers are recruited and trained to use the equipment  
>in an emergency. The incentive is that the individual gets to keep the  
>equipment and use it even in normal times. And if it breaks, he simply  
>turns it in for a replacement. Now we have commercially equipped  
>volunteer communicators and we've released multiple millions of dollars  
>of spectrum to the commercial interests. Pretty good plan.

u>

>Far fetched? Well consider that many european countries do the same  
>thing with weapons for the civilian armies. Or that this very  
>thing is done with turnout gear for volunteer firemen and rescue  
>squad members. With the budget problems, there could be great incentive  
>to eliminate the "problem" of amateur radio and all the squabbling.

Why are you so afraid of the FCC? Have you forgotten that they work for you(John Q Public ;-) Look, when amateur radio is doing emergency communications we are operating "FOR THE PUBLIC GOOD" and that just can't be argued ANY other way. If FCC is openly hostile to hams(and I'll give you the point that they haven't been acting friendly lately) I'd say its time to replace the rascals, not just try to tow the party line that they(FCC) dictate. If FCC makes rules we don't like then we have the right/obligation to petition

them to change these rules. If they don't listen, then we can go to their bosses and cause some changes that way. Now I'm not as naive as the last two sentences may illustrate :-) but I do believe that if you think your getting stepped on then you best squeak up!

>From my perspective as a communications officer, I could easily support  
>the program. After all, the major thing most local government agencies  
>see from the ham population is someone approaching with his hand out!  
>The hams want you to buy them repeaters (which we've done). They want  
>special site consideration (which they get) such as reduced or free rent.  
>They want us to buy radios to be put at "key player" residences (which  
>we have NOT done). So if I'm going to spend this money, why not just  
>buy radios that operate on our EMA frequencies so that any volunteer can  
>use them?

>

>I'm obviously playing devil's advocate in the above text. I hope the  
>service can straighten out its act. We have to face the reality that  
>what we do in emergency service, important as it is, is a drop in the  
>bucket. We are grossly failing at our other charters of building

Nope, what we do is DAMN important. Point in fact - we weren't in place 4 years ago to help out. A hazardous materials spill happened, the city evacuated about 300 homes into shelters. The city handled the spill competently, but didn't provide information to the people in the shelters. There wasn't any communications. City hall got reamed! The fact that they did a good job of protecting their citizens was not relevant, they didn't keep said citizens informed as to when they could expect to go home. My main task in the city is to provide this communications path, or any others that pop up on the spur of the moment. I'd say it was DAMN important to keep the citizens informed, fed, and sheltered. That's what my ARES group is part of. City hall seems to agree. They invite us to all of their drills and participate when we schedule our own. This keeps us in constant touch with the city's needs.

>international good will (remind me again how a pileup of California Kilowatt  
>stations builds good will), training a reserve of operators (other than  
>appliance) or advancing the state of the art (other than a TINY minority).  
>We could fix the goodwill aspect with only a change of mind. The other  
>problems are much harder.

>

>So the biggest things we have going for us now is tradition and  
>inertia. Both of these things are best maintained by total silence.  
>Things like the 20 meter squabble only remind the FCC that some longterm  
>problems in Amateur radio should be addressed. We're going to learn that  
>lesson yet again, I'm afraid.

>

>So what's the solution? Well there may not be solutions to some

>of the immediate problems - it may have already gone too far.  
>We could do some other things, though.  
>  
>First off, cut the shit on 20 meters. We need to stay OUT of the attention  
>of the FCC. Second, we need to look closely at the needs of those who  
>could use our services.

Your right about tradition and inertia being positive influences in that as a service we have in the past done some good things and attempted to be self policing. I disagree about keeping out of the FCC's eyes. In fact I'd say its been more the other way around. Let me tell you another story about dealing with the FCC back in the late 70's. Down in LA there was a huge problem with jamming on 2m repeaters. Obscene language was all the rage with these guys. They finally made the mistake of infesting the Southern Cal DX club repeater. The DX club reacted by hasseling the FCC through their representatives in congress, phone calls and letters of complaint. The LA office finally got the message and dedicated a little time to the service. Several people went to jail because of their jamming activities. This cleaned up the problem for quite awhile though it ought to be a periodic practice! Moral of the story is that there are certain types of personalities that a tradition of self-policing has no bearing on. This is where the FCC MUST be involved. New laws making activities more restrictive won't solve ANY problems. It'll just give people more things to argue about. For proof of this just look at what FCC did with CB in the 1970's.

>A prime example is what the local ham club did here in Marietta for SET.  
>Rather than play contest for SET, the club made arrangements to work with  
>the city and county police agencies such that the club set up a parallel  
>dispatch network for the police. A ham rode in each police car that  
>participated. Another ham set up at the dispatch center. Each piece of  
>traffic was handled in parallel by the police and the ham dispatcher.  
>The drill was TREMENDOUSLY sucessful. A large number of important  
>government officials got to see ham radio at its finest.

This is what the ARES should be doing in your local(in conjunction with the local ham club!). When hams talk to the agencies they serve they find out what kinds of supplemental comm is needed. This is certainly the place to start!.

>  
>I hope we can get it together before it's too late. I do enjoy ham radio  
>and hope that in my retirement, I will have a frequency or 2 below light  
>on which to communicate.  
>  
>John  
>  
>--

>John De Armond, WD40QC | Manual? ... What manual !!?  
>Radiation Systems, Inc. Atlanta, GA | This is Unix, My son, You  
>emory!rsiatl!jgd \*\*I am the NRA\*\* | just GOTTA Know!!!

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Date: Mon, 13 Nov 89 08:36:22 EST  
From: es!Tim\_McNamara\_office@harvard.harvard.edu  
Subject: Magnetic Effects

A very comprehensive 3 Part article was done regarding the effects of radiation on the human body by New Yorker Magazine.

The issue dates I believe are: May - July 1989.

I have'nt yet read all the articles, but for example the article on Power Line generated radiation is about 28 pages long.

73,  
Tim McNamara - KC1LM

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Date: 13 Nov 89 14:29:25 GMT  
From: philmtl!philabs!briar.philips.com!rfc@uunet.uu.net (Robert Casey;6282;3.57;\$0201)  
Subject: mod for tm721A,731A (corrected version)

copied from packet:  
From: KA2YKC@KA2YKC  
To: MODS@ALLBBS

The attached file is the corrected version of the KENWOOD TM-721A/731A expanded RX/TX frequency modification which has been circulated throughout the USA. I had tried the procedure previously and was unable to complete it with results. I got lucky and an anonymous source with pull at Kenwood USA was able to obtain the correct procedure for me, including a diagram!!!!!!... I have tried the procedure on both a 721A and a 731A, and it works perfect.

\*\*\*\* DISCLAIMERS \*\*\*\*

The above information is intended to be distributed for overseas, military, government, and laboratory/experimental use only. I assume no responsibility for the results obtained by this modification.



P.S.> The repeater modification for the new TM-731A/631A rigs is identical and exactly the same as the procedure on the TM-721A/631A rigs.

73 and enjoy Eric ka2ykc @KA2YKC-4

(note: I haven't tried this, proceed at your own risk! WA2ISE)

#### << KENWOOD TM-721A/731A EXPANDED RX/TX FREQUENCY COVERAGE MODIFICATION

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The following is the modification for the TM-721/731, which will allow TX/RX out of band, and allow tuneable windows from 100-200 MHz and 400 to 500 Mhz.

1 - Disassemble the radio as per the instructions in the cross band modification, so that you have the control panel exposed.

2 - On the board vertically mounted to the main chassis now exposed, locate R57 (TM-721A, R25 on TM-731A) towards the middle and bottom of this circuit board and remove. Be careful not to confuse this resistor with R58 (R26 on TM-731A) at the top of this board.

3 - Look on the board which is part of the front sub-chassis which is now free of the main unit, on the same side as the lithium battery, for a line of resistors, R110, R113, and R114. Between R113 and R114 is a pair of pads. They are SMT pads, so they are small and hard to identify.

4 - Connect a jumper across the pads. Be careful of this one because there is another conductor running between the opening of the pads. DO NOT SHORT !!

5 - There is another pad pair on the other side of R114, about one one inch and very close to the lithium battery. It has a blue surface mount resistor connecting it presently. Add a jumper here, thus shorting across the resistor. The first jumper is approximately 1 inch from the bottom of the board. The second is about one quarter of an inch from the bottom. This area is very sparse, and these resistors are all dead in line, and about slightly less than 1/2 inch apart.

It is strongly suggested that you do not attempt to do these mods unless you have the right equipment and skills. Also, the VCO has to be adjusted as per the service manual, and receiver alignment is also recommended for out of band

operation above 460.000 Mhz.

\*\*\*\* For MARS/CAP frequency transmit enable only (142 - 152  
Mhz), complete \*\*\*\* STEP 2 ONLY

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Original procedure written by NZ2T, corrected by KA2YKC  
with help from an anonymous ham friend at Kenwood USA.

73 de  
ka2ykc @ KA2YKC-4 BBS

0308z, 794 msgs, #8912 last @KD6TH-4 MailBox>

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Date: Mon, 13 Nov 89 12:29:57 EST  
From: Robert Carpenter <rc@cmr.ncsl.nist.gov>  
Subject: VHF DX

To amplify on Jim Reiser's comments, the 50 MHz band is now hitting its sunspot-maximum stride at last. Now that most European countries have joined the rest of the world in allowing hams on 6, we're seeing what a good place it is for the band. The Gs have been working Australia, Japan, and all over the middle east, Africa and South America, as well as much of North America. As stated, this past week has been especially good, the best day being Saturday. At last the openings didn't stop in the northern states, and we in the D.C. area had a chance. I picked up 7 new "countries" (GU, GI, OH, LA, F, SM, PA), as well as working a number of Gs. Other locals worked Senegal, etc, and of course the HCs have been in most days. Saturday the opening extended into Texas and even New Mexico (to Europe), and there was one Washington (state) to G contact.

Propagation is best when it is around mid-day at the path mid-point. In other words the US West Coast works Japan and VK in late afternoon PST.

ALL of this operation is using CW and SSB, and spreads over the 50.0 - 50.3 MHz region of the band, peaking 50.1 to 50.15 MHz.

Come join us on 6.  
Bob, W30TC  
(BTW - Jim AD1C, I assume you are related to W1JR.)

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End of INFO-HAMS Digest V89 Issue #874

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